

# EPA National Estuary Program



Photo credit: Bryon Chamberlin

## Federal Panel Presentation for Congressional Estuary Caucus

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Photo credit: Nanette O'Hara

# Estuary Values

Supply nurseries for over 75% of our commercial fish catch and 80-90% of the recreational fish catch worth billions of dollars.

A RAE presentation (see [http://www.habitat.noaa.gov/pdf/RAE\\_Restoration\\_Jobs.pdf](http://www.habitat.noaa.gov/pdf/RAE_Restoration_Jobs.pdf)) which cited Feierabend, S.J. and J.M. Zelazny. 1987. Status Report on our Nation's Wetlands. National Wildlife Federation: Washington, DC.



43% of the U.S. population reside in coastal areas.

Provide 40% of U.S. employment.

Generate 49% of GDP

Employs 13.5 million people in the tourism industry

Photo credit: Eric Vance, EPA

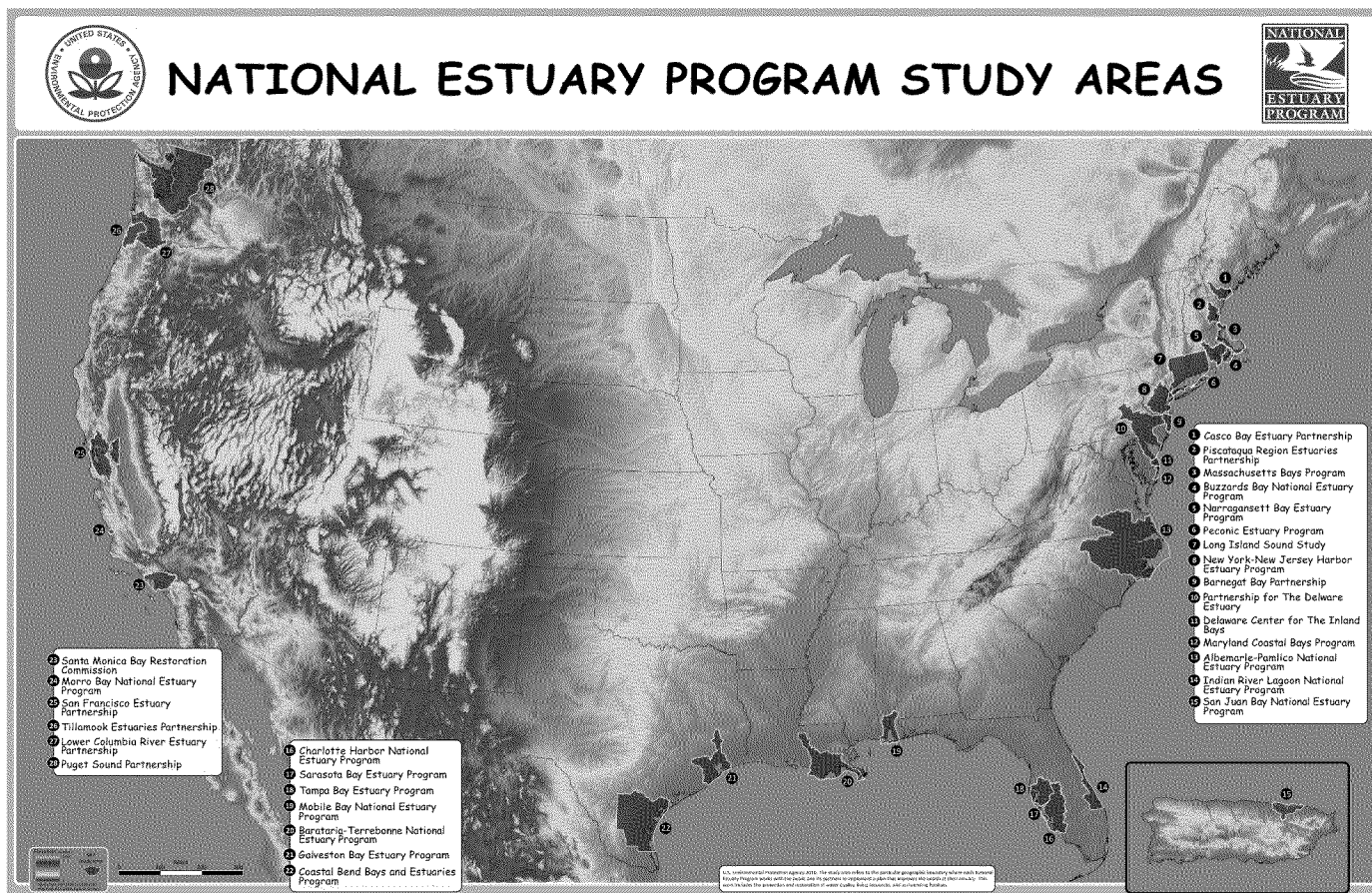
Linwood Pendleton (2007) The Economic & Market Value of America's Coasts and Estuaries: What's At Stake. Chapter 3. "The Value of Estuary Regions in the U.S. Economy". Colgan, Charles, University of Southern Maine.

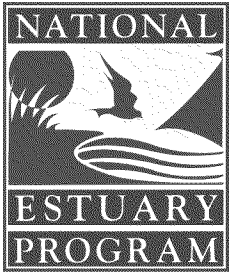
Sea Grant's 2014-2017 Strategic Plan, see <https://seagrant.noaa.gov/what-we-do/CurrentFocusAreas/ResilientCoastalCommunities/>



# National Estuary Program Sec. 320 CWA (1987)

- Protection of public water supplies;
- Protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife;
- Allows for recreational activities, in and on water; and
- Control of point and nonpoint sources of pollution.





# NEP Program Delivers Results

**Effective:** NEPs have protected & restored over 2 million acres of habitat since 2000

**Efficient:** On average NEPs have leveraged \$19 for every \$1 provided by EPA.



Photo credit: Tampa Bay Estuary Program



# Current Challenges for our Estuaries

- Habitat loss and degradation
- Excess nutrients
- Toxic Chemicals
- Emerging Contaminants
- Harmful algal blooms
- Pathogens
- Invasive species
- Climate stressors

Underlying issue is population density. More than half the population in the continental U.S. lives in the coastal zone-- only 17% of the land area.

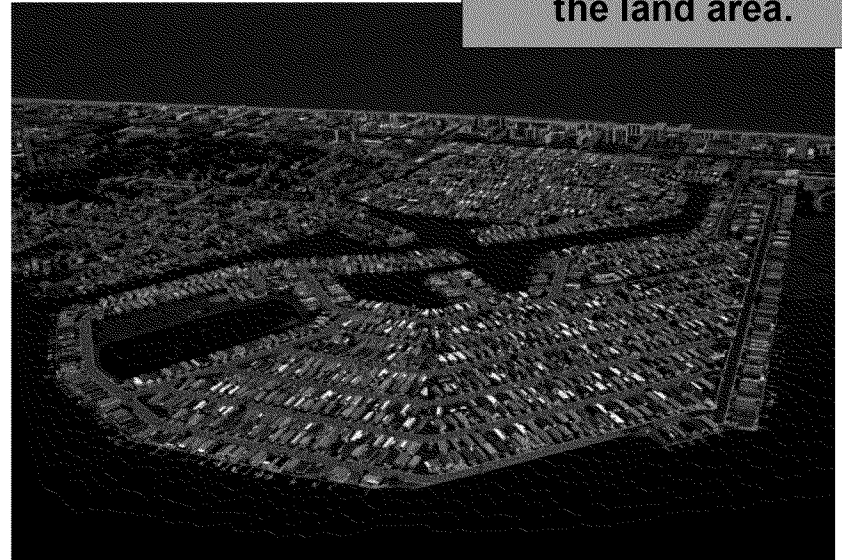


Photo credit: Andy Serrell



# Clean Water Act

- Water Infrastructure and Resiliency Finance Center / CW State Revolving Funds
- Nutrient Management
- Stormwater Management & Green Infrastructure
- Nonpoint Source Pollution: 319 Grants
- WQ Monitoring
- Coastal Wetlands Initiative
- Climate Ready Estuaries



# Tampa Bay Estuary Nutrient Reductions

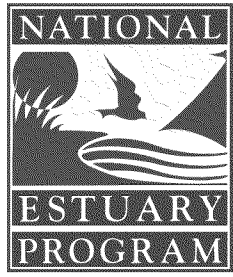
- Goal: Restore seagrass to 1950 levels after decades of decline
- Tampa Bay Nutrient Management Consortium
  - Implemented over 500 nutrient reduction projects
- As of 2016, Bay had 41,655 acres of sea grasses; a recovery of almost 16,000 acres of seagrass since 1992
- **More than 1200 acres above 1950s levels.**



# **Santa Monica Bay Stormwater Management/Green Infrastructure**

- Leveraged a \$18 mill state bond act for stormwater projects that implement Bay Restoration Plan (CCMP).
  - City of Torrance Storm Water Basin Enhancement
  - City of Calabasas Catch Basin Trash Inserts
  - City of Los Angeles University Park Rain Gardens
  - Milton Park Green Street Storm Water BMPs
  - County of Los Angeles Oxford Basin Enhancement

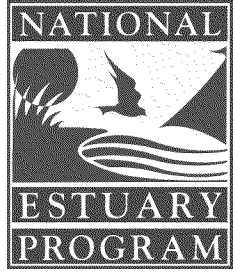
# Piscataqua Regional Estuaries Partnership



- Shared Estuarine and Near-shore Monitoring Program
  - NH Coastal Program (CZM)
  - Great Bay NERR
  - NH Sea Grant
  - NERACOOS (Northeast Regional Assn of Coastal Ocean Observing Systems)
- Cost effective partnership resulted in a New Hampshire \$260K capital budget investment.



# Barnegat Bay Partnership



- Partnership with Jacques Cousteau NERR
  - Comprehensive assessment and management workshops
  - Compiled the Barnegat Bay's 1<sup>st</sup> Science Prospectus in 2010.
    - Informed Governors' Initiative for Barnegat Bay.

# National Estuary Program

- Watershed approach
- Extensive public participation
- Collaborative problem-solving
- Science based decision making







**THANK YOU!**